

unless effective provision shall be made so as to give effect to the provisions set forth in this subsection (a).

(b) If this Warrant shall be exercised in part only, the Company shall, upon surrender of this Warrant for cancellation, promptly execute and deliver (but in no event more than ten business days) a new Warrant evidencing the rights of the Holder thereof to purchase the balance of the Warrant Shares purchasable hereunder as to which the Warrant has not been exercised. If this Warrant is exercised in part, such exercise shall be for a whole number of Warrant Shares. Upon any exercise and surrender of this Warrant, the Company (i) will issue and deliver to the Holder a certificate or certificates in the name of the Holder for the largest whole number of Warrant Shares to which the Holder shall be entitled and, if this Warrant is exercised in whole, in lieu of any fractional Warrant Share to which the Holder otherwise might be entitled, cash in an amount equal to the fair value of such fractional Warrant Share (determined in such reasonable and equitable manner as the Board of Directors of the Company (the "BOARD") shall in good faith determine), and (ii) will promptly deliver (but in no event more than ten business days) to the Holder such other securities, properties and cash which the Holder may be entitled to receive upon such exercise, or the proportionate part thereof if this Warrant is exercised in part, pursuant to the provisions of this Warrant.

2. ANTI-DILUTION PROVISIONS. The Warrant Share Price in effect at any time and the number and kind of securities issuable upon exercise of this Warrant shall be subject to adjustment from time to time upon the happening of certain events as follows:

2.1 Adjustments.

(a) DEFINITION OF ADDITIONAL STOCK. The term "Additional Shares of Common Stock" includes all shares of Common Stock issued by the Company after the Date of Issuance, other than:

(i) Shares of Common Stock issued upon conversion of shares of Series A Preferred Stock;

(ii) Shares of Common Stock (subject to appropriate adjustment for any stock dividend, stock split, combination or other similar recapitalization affecting such shares) issuable or issued to the Company's employees, directors or consultants pursuant to a stock option plan or restricted stock plan approved by the Board;

(iii) Shares of Common Stock issued or issuable pursuant to subsection 2.1(b)(iv) below;

(iv) Shares of Common Stock or Preferred Stock issuable upon exercise of options, warrants or upon conversion of convertible securities or other rights outstanding as of the Date of Issuance; and

(v) Shares of capital stock or options or warrants to purchase capital stock issued to financial institutions or lessors in connections with commercial credit

agreements, equipment financings or similar transactions or to other corporations, persons or entities in connection with acquisitions, mergers or similar business combinations, partnership arrangements, strategic alliances, licensing arrangements or similar non-capital raising transactions approved by the Board; PROVIDED THAT if more than 33% of the currently outstanding shares of capital stock are issued in connection with one or a series of related acquisitions, mergers or similar business combinations, then any shares issued in excess of 33% of the currently outstanding shares of capital stock shall be deemed Additional Shares of Common Stock; PROVIDED, FURTHER, THAT in no event shall the foregoing apply to any issuances to private equity or venture capital firms or any private equity division of any investment bank or commercial bank unless such issuances are made pursuant to contracts or other obligations existing as of the date hereof.

(b) DIVIDEND, SUBDIVISION, COMBINATION OR RECLASSIFICATION OF COMMON STOCK. In the event that the Company shall at any time or from time to time after the issuance of this Warrant but prior to the exercise hereof:

- (i) make a dividend or distribution on the outstanding shares of Common Stock payable in capital stock;
- (ii) subdivide or reclassify or reorganize its outstanding shares of Common Stock into a greater number of shares;
- (iii) combine or reclassify or reorganize its outstanding shares of Common Stock into a smaller number of shares; or
- (iv) issue, by reclassification of its Common Stock or other reorganization, any Additional Shares of Common Stock;

then the number and kind of Warrant Shares purchasable upon exercise of this Warrant shall be adjusted so that the Holder upon exercise hereof shall be entitled to receive the kind and number of Warrant Shares or other securities of the Company that the Holder would have owned or have been entitled to receive after the happening of any of the events described above had this Warrant been exercised immediately prior to the happening of such event or any record date with respect thereto. Whenever the number of Warrant Shares purchasable upon exercise hereof is adjusted as herein provided, the Warrant Price shall be adjusted by multiplying the Warrant Price by a fraction, the numerator of which is equal to the number of shares of Common Stock purchasable prior to the adjustment and the denominator of which is equal to the number of shares of Common Stock purchasable after the adjustment. An adjustment made pursuant to this Section 2.1(b) shall become effective immediately after the record date in the case of a dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or issuance. If, as a result of an adjustment made pursuant to this Section 2.1(b), the Holder of this Warrant thereafter surrendered for exercise shall become entitled to receive shares of two or more classes of capital stock or shares of Common Stock and any other class of capital stock of the Company, the Board (whose good faith determination shall be applied fairly and ratably to all holders of Warrants and shall be conclusive and shall be

described in a written notice to all holders of Warrants promptly after such adjustment) shall determine in good faith the allocation of the adjusted Warrant Share Price between or among the shares of such classes of capital stock or shares of Common Stock and such other class of capital stock.

The adjustment to the number of Warrant Shares purchasable upon the exercise of this Warrant described in this Section 2.1(b) shall be made each time any event listed in paragraphs (i) through (iv) of this Section 2.1(b) occurs.

(c) ISSUANCE OF COMMON STOCK BELOW WARRANT SHARE PRICE. If the Company shall issue any Additional Shares of Common Stock after the date hereof (excluding any such issuance for which an adjustment is made under the foregoing subsection (b)), for no consideration or for a consideration per share less than the Warrant Share Price in effect on the date of and immediately prior to such issue, then in such event, the Warrant Share Price shall be reduced, concurrently with such issue, to a price equal to the quotient obtained by dividing:

(A) an amount equal to (x) the total number of shares of Common Stock outstanding immediately prior to such issuance or sale multiplied by the Warrant Share Price in effect immediately prior to such issuance or sale, plus (y) the aggregate consideration received or deemed to be received by the Company upon such issuance or sale, by

(B) the total number of shares of Common Stock outstanding immediately after such issuance or sale.

As used herein, "Market Price" means, with respect to the shares of Common Stock, (a) if the shares are listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market, the last reported sales price as reported on such exchange or market; (b) if the shares are not listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market, the average of the last reported closing bid and asked quotation for the shares as reported on the National Association of Securities Dealers Automated Quotation System ("NASDAQ") or a similar service if NASDAQ is not reporting such information; (c) if the shares are not listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market or quoted by NASDAQ or a similar service, the average of the last reported bid and asked quotation for the shares as quoted by a market maker in the shares (or if there is more than one market maker, the bid and asked quotation shall be obtained from two market makers and the average of the lowest bid and highest asked quotation). In the absence of any available public quotations for the Common Stock, the Board shall determine in good faith the fair value of the Common Stock, which determination shall be set forth in a certificate by the Secretary of the Company.

(d) ISSUANCE OF OPTIONS AND CONVERTIBLE SECURITIES DEEMED ISSUANCE OF ADDITIONAL SHARES OF COMMON Stock. If the Company, at any time or from time to time after the Date of Issuance, shall issue any options, warrants or other rights to purchase Common Stock

(collectively, "OPTIONS") or securities that, by their terms, directly or indirectly, are convertible into or exchangeable for shares of Common Stock ("CONVERTIBLE Securities") or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which Additional Shares of Common Stock are deemed to be issued:

(i) no further adjustment in the Warrant Share Price shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such Convertible Securities and, upon the expiration of any such Option or the termination of any such right to convert or exchange such Convertible Securities, the Warrant Share Price then in effect hereunder shall forthwith be increased to the Warrant Share Price which would have been in effect at the time of such expiration or termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination, never been issued, and the Common Stock issuable thereunder shall no longer be deemed to be outstanding;

(ii) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Company, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Warrant Share Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities, provided that no readjustment pursuant to this clause (ii) shall have the effect of increasing the Warrant Share Price to an amount which exceeds the lower of (A) the Warrant Share Price on the original adjustment date, or (B) the Warrant Share Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date; and

(iii) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any decrease in the consideration payable to the Company, or increase in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Warrant Share Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such decrease or increase becoming effective, be recomputed to reflect such decrease or increase insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities, provided that no readjustment pursuant to this clause (iii) shall have the effect

of decreasing the Warrant Share Price to an amount which exceeds the lower of (A) the Warrant Share Price on the original adjustment date, or (B) the Warrant Share Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date.

(iv) DETERMINATION OF CONSIDERATION. For purposes of this Subsection 2.1(d), the consideration received by the Company for the issue of any Additional Shares of Common Stock shall be computed as follows:

(A) CASH AND PROPERTY: Such consideration shall:

- (1) insofar as it consists of cash, be computed at the aggregate of cash received by the Company, excluding amounts paid or payable for accrued interest or accrued dividends;
- (2) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board; and

in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Company for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (1) and (2) above, as determined in good faith by the Board.

(B) OPTIONS AND CONVERTIBLE SECURITIES. The consideration per share received by the Company for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 2.1(d)(ii), relating to Options and Convertible Securities, shall be determined by dividing

- (1) the total amount, if any, received or receivable by the Company as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Company upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by
- (2) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent

adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

In the event that at any time, as a result of an adjustment made pursuant to this Section 2.1, the Holder of this Warrant thereafter shall become entitled to receive any shares of the Company, other than Common Stock, thereafter the number of such other shares so receivable upon exercise of this Warrant shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Common Stock contained herein.

(e) EXTRAORDINARY DISTRIBUTIONS. In case the Company shall at any time or from time to time, after the issuance of the Warrant but prior to the exercise hereof, distribute to all holders of its Common Stock (including any such distribution made in connection with a consolidation or merger in which the Company is the continuing or surviving corporation and the Common Stock is not changed or exchanged) cash, evidences of indebtedness, securities or other property or assets (excluding any such event for which adjustment is made under Section 2) or rights or warrants to subscribe for or purchase any of the foregoing, then, and in each such case, the Holder shall be entitled to participate in any such distribution based on the number of shares of Common Stock it would have been entitled to receive had the Warrant been exercised immediately prior to the occurrence of such distribution, as if the Holder were the owner of such shares of Common Stock at the time of such distribution. Notwithstanding the foregoing, this Section 2.1(e) shall be of no force or effect until and unless such time as the Company shall grant a similar right to holders of warrants issued after the date hereof, at which time the Holders shall be entitled to the same protection for extraordinary dividends as granted to such future holders of warrants, if any.

2.2 OTHER ACTION AFFECTING WARRANT SHARES. If the Company takes any action affecting its shares of Common Stock after the date hereof, that would be covered by Section 2.1 but for the manner in which such action is taken or structured, which would in any way diminish the value of this Warrant, then the Warrant Share Price shall be adjusted in such manner as the Board shall in good faith determine to be equitable under the circumstances.

2.3 NOTICE OF ADJUSTMENTS. Upon the occurrence of each adjustment or readjustment of the Warrant Share Price pursuant to this Section 2, the Company at its expense will as promptly as possible, but in any event within ten (10) business days, compute such adjustment or readjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment or readjustment, including a statement of the adjusted Warrant Share Price or adjusted number of shares of Common Stock, if any, issuable upon exercise of each Warrant, describing in reasonable detail the transaction giving rise to such adjustments and showing in detail the facts upon which such adjustment or readjustment is based. The Company will forthwith mail, by first class mail, postage prepaid, a copy of each such certificate to the Holder of this Warrant at the address of such Holder as shown on the books of the Company, and to its Transfer Agent.



2.4 OTHER NOTICES. If at any time:

(a) the Company shall (i) offer for subscription pro rata to the holders of shares of the Common Stock any additional equity in the Company or other rights; (ii) pay a dividend in additional shares of the Common Stock or distribute securities or other property or assets to the holders of shares of the Common Stock (including, without limitation, cash, evidences of indebtedness and equity and debt securities); or (iii) issue securities convertible into, or rights or warrants to purchase, securities of the Company;

(b) there shall be any capital reorganization or reclassification or consolidation or merger of the Company with, or sale, transfer or lease of all or substantially all of its assets to, another entity; or

(c) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in any one or more of said cases, the Company shall give, by first class mail, postage prepaid, to the Holder of this Warrant at the address of such Holder as shown on the books of the Company, (x) at least 10 days' prior written notice of the date on which the books of the Company shall close or a record shall be taken for such subscription rights, dividend, distribution or issuance; PROVIDED THAT such ten (10) day period shall be increased to thirty (30) days in the case of Section 2.4(a)(ii), and (y) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, at least 10 days' prior written notice of the date when the same shall take place if no stockholder vote is required and at least 10 days' prior written notice of the record date for stockholders entitled to vote upon such matter if a stockholder vote is required. Such notice in accordance with the foregoing clause (x) shall also specify, in the case of any such subscription rights, the date on which the holders of shares of Common Stock shall be entitled to exercise their rights with respect thereto, and such notice in accordance with the foregoing clause (y) shall also specify the date on which the holders of shares of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, as the case may be.

2.5 ADJUSTMENT CALCULATIONS. No adjustment in the Warrant Share Price shall be required unless such adjustment would require an increase or decrease of at least one cent (\$0.01) in such price; provided, however, that any adjustments which by reason of this Section 2.5 are not required to be made shall be carried forward and taken into account in any subsequent adjustment required to be made hereunder. All calculations under this Section 2 shall be made to the nearest cent or to the nearest one-hundredth of a share, as the case may be.

2.6 APPRAISAL. If a majority in interest of the Holders reasonably disagrees with any of the Board's determinations referred to in this Section 2 (each, a "DETERMINATION"), then the Company and a majority in interest of such Holders (the "WARRANT REPRESENTATIVE") shall use good faith efforts to mutually agree upon the designation of a single Qualified Appraiser (as defined below) within seven (7) business days of such event requiring a Determination. The date

of such event requiring a Determination shall be referred to as the "DETERMINATION DATE." If such a single Qualified Appraiser is designated, that person shall make a Determination. If the Company and the Warrant Representative do not so agree upon the designation of a single Qualified Appraiser within such period, then within five (5) business days following the end of such period, each of the Company and the Warrant Representative by written notice to the other shall designate a Qualified Appraiser (or if any party fails to so select a Qualified Appraiser within the time period specified, the Person selected by the other party shall be the Qualified Appraiser) and the two Qualified Appraisers so designated shall within ten (10) business days of their designation jointly designate a third Qualified Appraiser and solely such third Qualified Appraiser so designated shall independently make a Determination. If there is only a single Qualified Appraiser, the fees and expenses of the Qualified Appraiser shall be paid equally by the Company and the Warrant Representative. If three Qualified Appraisers are appointed, the Company shall pay the fees and expenses of the Qualified Appraiser which it appoints, the Warrant Representative shall pay the fees and expenses of the Qualified Appraiser which it appoints, and the fees and expenses of the third Qualified Appraiser shall be shared equally by the Company and the Warrant Representative. The designated Qualified Appraiser shall make the Determination not later than ten (10) business days following the Determination Date. The Determination made by the Qualified Appraiser shall be final, conclusive and binding on the parties hereto. None of the Qualified Appraisers shall be affiliated with any of the Company, the Warrant Representative or another Qualified Appraiser. For the purposes of this Agreement, "QUALIFIED APPRAISER" shall mean an individual who is engaged on a regular basis (although not necessarily full time) in valuing securities or arrangements similar to this Agreement, as the case may be, and may include (but shall not be limited to) professional business appraisers, investment bankers or accountants.

3. NO VOTING RIGHTS AS STOCKHOLDERS OR LIABILITIES. Except as otherwise provided herein, this Warrant shall not be deemed to confer upon the Holder any right to vote or to consent to or receive notice as a stockholder of the Company, as such, in respect of any matters whatsoever, or any other rights or liabilities as a stockholder, prior to the exercise hereof. Nothing contained in this Warrant shall be deemed as imposing any liabilities on the Holder to purchase any securities whether such liabilities are asserted by the Company or by creditors or stockholders of the Company or otherwise.

4. WARRANTS TRANSFERABLE. Subject to the terms hereof, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant with a properly executed Form of Assignment at the principal offices of the Company. This Warrant and the underlying shares of Common Stock may not be offered, sold or transferred except in compliance with the Securities Act, and any applicable state securities laws, or an exception therefrom, and then only against receipt of an agreement of the person to whom such offer or sale or transfer is made to comply with the provisions of this Warrant with respect to any resale or other disposition of such securities; provided that no such agreement shall be required from any person purchasing this Warrant or the underlying shares of Common Stock pursuant to a registration statement effective under the Securities Act. No such disposition shall occur without an opinion of such Holder's counsel, which opinion shall be reasonably satisfactory to the Company's counsel.



5. WARRANTS EXCHANGEABLE; ASSIGNMENT; LOSS, THEFT, DESTRUCTION, ETC. This Warrant is exchangeable, without expense, upon surrender hereof by the Holder hereof at the principal offices of the Company, or at the office of its Transfer Agent, if any, for new Warrants of like tenor representing in the aggregate the right to subscribe for and purchase the Warrant Shares which may be subscribed for and purchased hereunder, each such new Warrant to represent the right to subscribe for and purchase such Warrant Shares as shall be designated by such Holder hereof at the time of such surrender. Upon surrender of this Warrant to the Company at its principal office, or at the office of its Transfer Agent, if any, with an instrument of assignment duly executed and funds sufficient to pay any transfer tax, the Company shall, without charge, execute and deliver a new Warrant in the name of the assignee named in such instrument of assignment and this Warrant shall promptly be cancelled. This Warrant may be divided or combined with other warrants which carry the same rights upon presentation hereof at the principal office of the Company, or at the office of its Transfer Agent, if any, together with a written notice specifying the names and denominations in which new Warrants are to be issued and signed by the Holder hereof. The term "Warrant" as used herein includes any Warrants into which this Warrant may be divided or exchanged. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction, upon delivery of indemnity reasonably satisfactory to the Company, or, in the case of any such mutilation, upon surrender or cancellation of this Warrant, the Company will issue to the Holder hereof a new Warrant of like tenor, in lieu of this Warrant, representing the right to subscribe for and purchase the Warrant Shares which may be subscribed for and purchased hereunder. Any such new Warrant executed and delivered shall constitute an additional contractual obligation of the Company, whether or not this Warrant so lost, stolen, destroyed, or mutilated shall be at any time enforceable by anyone.

6. LEGENDS; INVESTMENT REPRESENTATIONS. Any certificate evidencing the securities issued upon exercise of this Warrant shall bear a legend in substantially the following form:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY OTHER SECURITIES LAWS, AND SUCH SECURITIES MAY NOT BE OFFERED, SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE ASSIGNED UNLESS SO REGISTERED OR AN EXEMPTION FROM REGISTRATION UNDER SAID ACT AND ANY OTHER APPLICABLE SECURITIES LAWS IS AVAILABLE.

7. MODIFICATIONS AND WAIVERS. The Holder of this Warrant acknowledges and agrees that the terms of this Warrant may be amended, modified or waived only by the written agreement between the Holder and the Company.

8. EXPENSES. The Company shall pay all expenses and other charges payable in connection with the preparation, issuance and delivery of this Warrant and all substitute Warrants. The Holder shall pay all taxes in connection with any sale, assignment or other transfer of this Warrant.



9. BOOKS. The Company shall maintain, at the office or agency of the Company maintained by the Company, books for the registration and transfer of the Warrant.

10. RESERVATION OF WARRANT SHARES. The Company covenants and agrees that it will at all times reserve and keep available, free from preemptive rights, out of the aggregate of its authorized but unissued Common Stock or its authorized and issued Common Stock held in its treasury, solely for the purpose of enabling it to satisfy any obligation to issue Warrant Shares upon exercise of this Warrant, the maximum number of shares of Common Stock which may then be deliverable upon the exercise of this Warrant. The Company or, if appointed, the transfer agent for the Common Stock (the "TRANSFER AGENT"), and every subsequent transfer agent for any shares of the Company's capital stock issuable upon the exercise of any of the rights of purchase aforesaid will be irrevocably authorized and directed at all times to reserve such number of authorized shares as shall be required for such purpose. The Company will keep a copy of this Warrant on file with the Transfer Agent and with every subsequent transfer agent for any shares of the Company's capital stock issuable upon the exercise of the rights of purchase represented by this Warrant. The Company will furnish such Transfer Agent a copy of all notices of adjustments and certificates related thereto transmitted to the Holder pursuant to Section 2.5 hereof. The Company covenants that all Warrant Shares which may be issued upon exercise of this Warrant will, upon issue, be validly issued, fully paid and nonassessable, not subject to any preemptive rights, and free from all taxes, liens, security interests, charges, and other encumbrances with respect to the issuance thereof.

11. REGISTRATION. The Warrant Shares shall be registered under the Securities Act, to the extent provided in that certain Registration Rights Agreement of even date herewith, by and between the Company and the Holder of this Warrant.

12. LISTING ON SECURITIES EXCHANGES; REGISTRATION. If, and so long as, any class of the Company's Common Stock shall be listed on any national securities exchange (as defined in the Exchange Act) or NASDAQ, the Company shall use its reasonable best efforts to, at its expense, obtain and maintain the approval for listing upon official notice of issuance of all Warrant Shares and maintain the listing of Warrant Shares after their issuance; and the Company will so list on such national securities exchange or NASDAQ, if applicable, will register under the Exchange Act (or any similar statute then in effect), and will maintain such listing of, any other securities that at any time are issuable upon exercise of this Warrant if and at the time any securities of the same class shall be listed on such national securities exchange or NASDAQ by the Company.

13. NO DILUTION OR IMPAIRMENT. The Company will not act for the purpose of avoiding or seeking to avoid the observance or performance of any of the terms of this Warrant, by amendment of its certificate or articles of incorporation or other organizational documents or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other action, but will, at all times, in good faith, assist in the carrying out of all such terms. Without limiting the generality of the foregoing, the Company will not increase the par value of any shares of stock receivable on the exercise of this Warrant above the amount payable therefor on such exercise.

14. MISCELLANEOUS.

14.1 NOTICES. All notices and other communications shall be mailed by first-class certified or registered mail, postage prepaid, sent by reputable overnight delivery, delivered by hand or sent by facsimile as follows:

If to the Company: Bioenvision, Inc.  
One Rockefeller Plaza  
Suite 1600  
New York, New York 10020  
Attention: President  
Facsimile: (212) 265-4680

With a copy to: Piper Rudnick LLP  
1251 Avenue of the Americas  
New York, New York 10020-1104  
Attention: Andrew J. Cosentino, Esq.  
Facsimile: (212) 884-8588

If to the Holder: The address and/or facsimile  
furnished to the Company in writing  
by the last registered Holder of  
this Warrant who shall have  
furnished an address and/or  
facsimile to the Company in writing.

except that any of the foregoing may from time to time by written notice to the other designate another address which shall thereupon become its effective address for the purposes of this paragraph. Any notices, requests or consents hereunder shall be deemed given, and any instruments delivered, five days after they have been mailed by first-class certified or registered mail, postage prepaid, or upon receipt if delivered by a reputable overnight courier or if delivered personally or by facsimile transmission.

14.2 ENTIRE AGREEMENT. This Warrant, including the exhibits and documents referred to herein which are a part hereof, contain the entire understanding of the parties hereto with respect to the subject matter and may be amended only by a written instrument executed by the parties hereto or their successors or assigns. Any paragraph headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Warrant.

14.3 GOVERNING LAW. This Warrant shall be governed by and construed in accordance with the laws of the State of New York with respect to contracts made and to be fully performed therein, without regard to the conflicts of laws principles thereof. The parties hereto hereby agree that any suit or proceeding arising under this Warrant, or in connection with the consummation of the transactions contemplated hereby, shall be brought solely in a federal or state court located in the County of New York and State of New York. By its execution hereof, both the Company and the undersigned hereby consent and irrevocably submit to the in personam jurisdiction of the federal and state courts located in the County of New York and State of New York and agree that any process in any suit or proceeding commenced in such courts under this Warrant may be served upon it personally or by certified or registered mail, return receipt requested, or by Federal Express or other courier service, with the same force and effect as if personally served upon the applicable party in New York and in the city or county in which such other court is located. The parties hereto each waive any claim that any such jurisdiction is not a convenient forum for any such suit or proceeding and any defense of lack of in personam jurisdiction with respect thereto.

14.4 HEADINGS. The headings of this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

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IN WITNESS WHEREOF, this Warrant Agreement has been executed as of the date first written above.

BIOENVISION, INC.

By: /s/ Christopher B. Wood

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Name: Dr. Christopher B. Wood  
Title: Chief Executive Officer



PURCHASE FORM

Dated: \_\_\_\_\_

The undersigned hereby irrevocably elects to exercise the within Warrant to the extent of purchasing \_\_\_\_\_ Warrant Shares and hereby makes full cash payment of \$\_\_\_\_\_ in payment of the exercise price thereof.

The undersigned has had the opportunity to ask questions of and receive answers from the officers of the Company regarding the affairs of the Company and related matters, and has had the opportunity to obtain additional information necessary to verify the accuracy of all information so obtained.

[The undersigned understands that the shares have not been registered under the Securities Act of 1933, as amended, or the securities laws of any other jurisdiction, and hereby represents to the Company that the undersigned is acquiring the shares for its own account, for investment, and not with a view to, or for sale in connection with, the distribution of any such shares.] [THIS MAY NOT APPLY DEPENDING UPON WHETHER THE REGISTRATION STATEMENT IS EFFECTIVE.]

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print or type name)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTICE: The signature of this Purchase Form must correspond with the name as written upon the face of the within Warrant, or upon the assignment thereof, if applicable, in every particular, without alteration, enlargement or any change whatsoever.

FORM OF ASSIGNMENT

[To be completed and signed only upon transfer of Warrant)

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto \_\_\_\_\_ the right represented by the within Warrant to purchase \_\_\_\_\_ shares of Common Stock of \_\_\_\_\_ to which the within Warrant relates and appoints \_\_\_\_\_ attorney to transfer said right on the books of \_\_\_\_\_ with full power of substitution in the premises.

Dated: \_\_\_\_\_, 200\_\_

\_\_\_\_\_  
(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

Address of Transferee:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

In the presence of:

\_\_\_\_\_

CONSENT OF ASSIGNEE

-----

I HEREBY CONSENT to abide by the terms and conditions of the within Warrant.

Dated: \_\_\_\_\_

\_\_\_\_\_  
(Signature of Assignee)

\_\_\_\_\_  
(Print or type name)

## BIOENVISION INC

345 PARK AVENUE  
41ST FLOOR  
NEW YORK, NY 10154  
212-750-6700

## EX-10

EXHIBIT 5  
SC 13D Filed on 05/20/2002  
File Number 005-78274



EXHIBIT 5  
to SCHEDULE 13D

REGISTRATION RIGHTS AGREEMENT

Registration Rights Agreement, dated as of May 7, 2002 (this "AGREEMENT"), by and among Bioenvision, Inc., a Delaware corporation (the "COMPANY"), and the Purchasers (as defined below).

W I T N E S S E T H :

WHEREAS, the Company is offering (the "OFFERING") an aggregate of up to Seventeen Million Seven Hundred Fifty Thousand Dollars (\$17,750,000) of shares of its Series A Preferred Stock, par value \$.001 per share (the "SERIES A PREFERRED STOCK"), and common stock purchase warrants exercisable for shares of Common Stock (the "WARRANTS," together with the Series A Preferred Stock, the "SECURITIES");

WHEREAS, the Company desires to issue and sell to the persons listed on SCHEDULE A, attached hereto (each a "PURCHASER," and collectively, the "PURCHASERS"), the Securities as set forth in one or more Securities Purchase Agreements entered into or to be entered into by and between the Company and each Purchaser (the "SECURITIES PURCHASE AGREEMENT");

WHEREAS, the Company and the Purchasers have entered or will have entered into a Securities Purchase Agreement;

WHEREAS, it is a condition precedent to the consummation of the transactions contemplated by the Securities Purchase Agreement that the Company provide for the rights set forth in this Agreement; and

WHEREAS, certain terms used in this Agreement are defined in Section 3 hereof.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants and agreements hereinafter contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, intending to be legally bound, the parties hereto hereby agree as follows:

1. REGISTRATION RIGHTS.

1.1 REQUIRED REGISTRATION. The Company shall use its reasonable best efforts to prepare and file with the SEC within sixty (60) days following the Initial Closing Date (as such term is defined in the Securities Purchase Agreement), a registration statement on Form SB-1 or successor form or another form selected by the Company that is available to it under the Securities Act which conforms with all applicable rules and regulations (the "REQUIRED REGISTRATION STATEMENT") with respect to all the Registrable Securities beneficially owned by the Purchasers following the Final Closing (as such term is defined in the Securities Purchase Agreement) to permit the offer and re-sale from time to time of such Registrable Securities in accordance with the methods of distribution provided by the Purchasers. The Company shall keep such Required Registration Statement continuously effective (the "EFFECTIVE PERIOD") until

the earliest to occur of (i) the date during which all Registrable Securities registered under the Required Registration Statement are sold, (ii) the date the Company delivers an opinion of counsel that each Designated Holder (as defined below) may sell in the open market in a single transaction all Registrable Securities then held by each such Designated Holder pursuant to Rule 144(k) of the Securities Act (or any successor provision then in effect) without being subject to the volume limitations thereof and (iii) the date (the "Form S-3 Date") that the Company is eligible to use Form S-3 or any successor form to register the offer and resale of the Registrable Securities; provided that the Company shall use its reasonable best efforts to convert the Required Registration Statement to a Form S-3 (or any successor form) pursuant to the rules and regulations of the SEC as soon as practicable after the Form S-3 Date. The Company shall use its reasonable best efforts to cause the Required Registration Statement to become and remain effective not later than 105 days after the Initial Closing Date.

To the extent that the Registrable Securities are not sold under the Required Registration Statement, the Purchasers shall have the registration rights as enumerated in Sections 1.2, 1.3 and 1.4.

## 1.2 DEMAND REGISTRATIONS.

(a) REQUESTS FOR REGISTRATION. Subject to Sections 1.2(b) and 1.2(e) below, the Purchasers holding at least 33% of the Registrable Securities (the "INITIATING HOLDERS") may at any time after the completion of the Effective Period or if the Required Registration Statement has not been effective for more than ninety (90) days immediately preceding any request under this Section 1.2(a), request registration under the Securities Act of all or part of their Registrable Securities on Form S-1, Form S-2 or any successor form of registration, or, if available, on Form S-3 or any successor form of registration; PROVIDED that the Initiating Holders (together with all other holders of Registrable Securities to be included in such registration) propose to sell Registrable Securities at an aggregate price (calculated based upon the Market Price of the Registrable Securities on the date of filing of the Registration Statement with respect to such Registrable Securities) to the public of the lesser of (i) \$1,000,000 or (ii) the remaining Registrable Securities. Each such registration request shall specify the number of Registrable Securities requested to be registered and if the offering is to be an underwritten offering. Within ten (10) days after receipt of any such request, the Company will give written notice of such requested registration to all other holders of Registrable Securities and, subject to the provisions hereof, will include in such registration all Registrable Securities with respect to which the Company has received written requests for inclusion therein within fifteen (15) days after the holder's receipt of the Company's notice. A registration requested pursuant to this Section 1.2(a) are referred to herein as a "DEMAND REGISTRATION."

(B) NUMBER OF REGISTRATIONS. The Purchasers and their permitted transferees are entitled to request two (2) Demand Registrations; PROVIDED that if the Company is eligible to file a registration statement on Form S-3, then the Initiating Holders shall not request a registration on Form S-1. The Company shall use its reasonable best efforts to cause any such

Demand Registration to become and remain effective not later than seventy five (75) days after it receives a request under Section 1.2(a) hereof; PROVIDED, that such seventy five (75) day period shall be reduced to sixty (60) days if the Company is filing a Registration Statement on Form S-3. Except as provided in Section 1.2(c) below, a registration shall not constitute a Demand Registration until it has become effective and remains continuously effective for the lesser of (i) the period during which all Registrable Securities registered in the Demand Registration are sold and (ii) 105 days; PROVIDED, HOWEVER, that a registration shall not constitute a Demand Registration if (x) after such Demand Registration has become effective, such registration or the related offer, sale or distribution of Registrable Securities thereunder is interfered with by any stop order, injunction or other order or requirement of the SEC or other governmental agency or court for any reason not attributable to the Initiating Holders and such interference is not thereafter eliminated or (y) the conditions specified in the underwriting agreement, if any, entered into in connection with such Demand Registration are not satisfied or waived, other than by reason of a failure by the Initiating Holders.

(c) WITHDRAWAL. If a holder of Registrable Securities (each a "DESIGNATED HOLDER" and collectively, the "DESIGNATED HOLDERS") sends the Company a written request for inclusion of part or all of such Designated Holder's Registrable Securities in a registration, such Designated Holder shall not be entitled to withdraw or revoke such request without the prior written consent of the Company unless the Designated Holders reimburse the Company for the registration expenses set forth in Section 1.6(s) with respect to such Demand Registration. If the Designated Holders fail to reimburse the Company for such registration expenses, including, but not limited to legal and accounting expenses, within thirty (30) days of receipt of notice of such registration expenses, then such request shall constitute a Demand Registration, unless such withdrawal or revocation was due to a material adverse change to the Company which, upon the advice of the Company's counsel, required disclosure on a Current Report on Form 8-K.

(d) PRIORITY IN DEMAND REGISTRATIONS. If a Demand Registration is an underwritten offering and the managing underwriters advise the Company in writing that in their opinion the number of Registrable Securities and, if permitted hereunder, other securities requested to be included in such offering, exceeds the number of Registrable Securities and other securities, if any, which can be sold therein without materially and adversely affecting the marketability of the offering (the "OFFERING QUANTITY"), then the Company will include in such registration securities in the following priority:

(i) First, for a demand made by the Initiating Holders, all Registrable Securities owned by the Initiating Holders and the number of shares to be offered for the account of all other Designated Holders, pro rata, based on the amount of Registrable Securities held by each such holder and the amount of Registrable Securities held by all such holders, on an as converted basis. To the extent more than 22.5% of the Registrable Securities, so requested to be registered by the Initiating Holders and the other Designated Holders are excluded from an offering under this Section 1.2(d) (a "RELOAD Event"), then the Designated Holders shall have the right to one additional Demand Registration (but in



no event shall the number of additional Demand Registrations pursuant to this Agreement exceed a total of three additional Demand Registrations) under, and subject to the limitations of, Section 3.1 upon the occurrence of each Reload Event.

(ii) Second, the number of shares to be offered for the account of the Company.

(iii) Third, to the extent (and only to the extent) that the Offering Quantity exceeds the aggregate amount of securities to be sold in clauses (i) and (ii), the Company will include in such registration any other Registrable Securities requested to be included in such offering, and if the number of such other holders' securities requested to be included exceeds the Offering Quantity, then the Company shall include only each such requesting holder's pro rata share of the Offering Quantity, based on the amount of securities held by such holder, on an as converted basis; PROVIDED, THAT no shares under clauses (ii) and (iii) shall be included on the holder's first Demand Registration on Form S-3.

(e) RESTRICTIONS ON DEMAND REGISTRATIONS. The Company will not be obligated to effect any Demand Registration within 120 days after the effective date of a previous Demand Registration or other registration of securities of the Company (other than a shelf registration under Rule 415 of the Securities Act or a Registration Statement on Form S-8) for the account of the Initiating Holders (so long as at least two-thirds of the Registrable Securities requested to be included in such registration by the Initiating Holders were included) or any other Designated Holder (so long as they had the opportunity to participate in such registration and at least two-thirds of the Registrable Securities requested to be included in such registration by the Designated Holders were included). Such 120-day period shall be reduced to seventy five (75) days, if less than two-thirds of the Registrable Securities requested to be registered are included in such registration. In addition, the Company will not be obligated to effect more than one Demand Registration within a nine (9) month period.

(f) SELECTION OF UNDERWRITERS. In connection with a Demand Registration that is an underwritten offering, at the request of the Initiating Holders or otherwise, the Company shall select a nationally recognized investment banking firm to administer the offering, such selection to be subject to the approval of the Initiating Holders which approval shall not be unreasonably withheld.

1.3 FORM S-3 REGISTRATION. If the Company is eligible to use Form S-3 under the Securities Act (or any similar successor form) and shall receive from a Purchaser and its permitted transferees (the "S-3 INITIATING HOLDERS") a written request or requests that the Company effect a registration on such Form S-3 pursuant to Rule 415 of the Securities Act and any related qualification or compliance with respect to all or part of the Registrable Securities owned by the S-3 Initiating Holders and its permitted transferees (PROVIDED, THAT the S-3 Initiating Holders registering Registrable Securities in such registration (together with all other holders of Registrable Securities to be included in such registration) propose to sell their Registrable

Securities at an aggregate price (calculated based upon the Market Price of the Registrable Securities on the date of filing of the Form S-3 with respect to such Registrable Securities) to the public of no less than \$1,000,000), the Company shall (i) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other holders of Registrable Securities; and (ii) as soon as practicable, use reasonable best efforts to file and effect such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of the Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other holder in the group of holders joining in such request as is specified in a written request given within fifteen (15) days after the holder's receipt of such written notice from the Company. No registration requested by any S-3 Initiating Holders pursuant to this Section 1.3 shall be deemed a registration pursuant to Sections 1.1 or 1.2.

#### 1.4 PIGGYBACK REGISTRATIONS.

(a) RIGHT TO PIGGYBACK. Whenever the Company proposes to register any of its securities under the Securities Act (other than pursuant to a Demand Registration, a registration pursuant to Section 1.3 or a registration on Form S-4 or S-8 or any successor or similar forms) and the registration form to be used may be used for the registration of Registrable Securities, whether or not for sale for its own account, the Company will give prompt written notice (but in no event less than twenty five (25) days before the anticipated filing date) to all holders of Registrable Securities, and such notice shall describe the proposed registration and distribution and offer to all holders of Registrable Securities the opportunity to register the number of Registrable Securities as each such holder may request. The Company will include in such registration all Registrable Securities with respect to which the Company has received written requests for inclusion therein within fifteen (15) days after the holders' receipt of the Company's notice (a "PIGGYBACK REGISTRATION").

(b) REASONABLE EFFORTS. The Company shall use all reasonable best efforts to cause the managing underwriter or underwriters of a proposed underwritten offering to permit the Registrable Securities requested to be included in a Piggyback Registration to be included on the same terms and conditions as any similar securities of the Company or any other security holder included therein and to permit the sale or other disposition of such Registrable Securities in accordance with the intended method of distribution thereof.

(c) WITHDRAWAL. Any Designated Holder shall have the right to withdraw its request for inclusion of its Registrable Securities in any Registration Statement pursuant to this Section 1.4 by giving written notice to the Company of its request to withdraw; PROVIDED, that in the event of such withdrawal (other than pursuant to Section 1.4(f) hereof, the Company shall not be required to reimburse such holder for the fees and expenses referred to in Section 1.6(s) hereof incurred by such holder prior to such withdrawal. The Company may withdraw a Piggyback Registration at any time prior to the time it becomes effective.

(d) OBLIGATIONS. No registration effected under this Section 1.4, and no failure to effect a registration under this Section 1.4, shall relieve the Company of its obligation to effect a registration upon the request of the Purchaser and its permitted transferees pursuant to Section 1.2 or Section 1.3, and no failure to effect a registration under this Section 1.4 and to complete the sale of Registrable Securities in connection therewith shall relieve the Company of any other obligation under this Agreement (including, without limitation, the Company's obligations under Section 1.7 and 1.8).

(e) PRIORITY IN REGISTRATIONS. If a Piggyback Registration is an underwritten primary registration on behalf of the Company, and the managing underwriters advise the Company in writing (with a copy to each party hereto requesting registration of Registrable Securities) that in their opinion the number of Registrable Securities requested to be included on a secondary basis in such registration exceeds the number which can be sold in such offering without materially and adversely affecting the marketability of such primary or secondary offering (the "COMPANY OFFERING QUANTITY"), then the Company will include in such registration securities in the following priority:

(i) First, the Company will include the securities the Company proposes to sell.

(ii) Second, the Company will include all Registrable Securities requested to be included by any Designated Holder, and if the number of such Designated Holders' securities requested to be included exceeds the Company Offering Quantity, then the Company shall include only each such requesting Designated Holders' pro rata share of the shares available for registration by the Purchaser, based on the amount of securities held by such holder, on an as converted basis.

(f) CUTBACK. If, as a result of the proration provisions of this Section 1.4, any Designated Holders shall not be entitled to include all Registrable Securities in a Piggyback Registration that such Designated Holders has requested to be included, such holder may elect to withdraw his request to include Registrable Securities in such registration but the Company shall be required to reimburse such holder for the fees and expenses referred to in Section 1.7(b) hereof incurred by such holder prior to such withdrawal.

#### 1.5 HOLDBACK AGREEMENTS.

(a) To the extent not inconsistent with applicable law, upon the request of the Company or, in the case of an underwritten public offering, the underwriters managing such underwritten offering of the Company's securities, each holder of Registrable Securities who owns at least 5% of the outstanding capital stock of the Company on an "as-converted" basis will not effect any public sale or distribution (other than those included in the registration) of any securities of the Company, or any securities, options or rights convertible into or exchangeable or exercisable for such securities during the seven days prior to and the 90-day period beginning on such effective date, unless (in the case of an underwritten public offering) the managing

underwriters otherwise agree to a shorter period of time. Notwithstanding the foregoing, no Designated Holder shall be required to enter into any such "lock up" agreement unless and until all of the Company's executive officers and directors execute identical "lock up" agreements and the Company uses commercially reasonable efforts to cause each holder of more than 5% of its outstanding capital stock execute identical "lock up" agreements. Neither the Company nor the underwriter shall amend, terminate or waive a "lock up" agreement unless each "lock up" agreement with a Designated Holder is also amended or waived in a similar manner or terminated, as the case may be.

(b) The Company shall have the right at any time to require that the Designated Holders of Registrable Securities suspend further open market offers and sales of Registrable Securities pursuant to a Registration Statement filed hereunder whenever in the reasonable judgment of the Company after consultation with counsel there is or may be in existence a Changing Event (as defined in Section 1.6(e)). The Company will give the Designated Holders notice of any such suspension and will use all reasonable best efforts to minimize the length of such suspension.

(c) The Company agrees not to effect any public sale or distribution of any of its securities, or any securities convertible into or exchangeable or exercisable for such securities (except pursuant to registrations on Form S-4 or S-8 or any successor thereto), during the period beginning on the effective date of any Registration Statement in which the Designated Holders of Registrable Securities are participating and ending on the earlier of (i) the date on which all Registrable Securities registered on such Registration Statement are sold and (ii) forty five (45) days after the effective date of such Registration Statement (except securities covered by such Registration Statement).

1.6 REGISTRATION PROCEDURES. Whenever any Registrable Securities are required to be registered pursuant to this Agreement, the Company will use reasonable best efforts to effect the registration and the sale of such Registrable Securities in accordance with the intended methods of disposition thereof, and pursuant thereto the Company will as expeditiously as possible:

(a) prepare and file with the SEC on any form, if not so otherwise provided for, for which the Company qualifies, as soon as practicable (but within 45 days) after the end of the period within which requests for registration may be given to the Company, a Registration Statement with respect to the offer and sale of such Registrable Securities and thereafter use reasonable best efforts to cause such Registration Statement to become effective and remain effective until the completion of the distribution contemplated thereby (and before filing such Registration Statement, the Company will furnish to the counsel selected by the holders of a majority of the Registrable Securities initiating such Registration Statement copies of all such documents proposed to be filed); PROVIDED, HOWEVER, that the Company may postpone for not more than thirty (30) calendar days the filing or effectiveness of a Demand Registration Statement if the Board of Directors, in its good faith judgment, determines that such registration

could reasonably be expected to have a material adverse effect on the Company and its stockholders including, but not limited to, any proposal or plan by the Company to engage in any acquisition of assets (other than in the ordinary course of business) or any merger, consolidation, tender offer or similar transaction then under consideration (in which event, the Designated Holders shall be entitled to withdraw such request, and if such request is withdrawn such registration will not count as a Demand Registration) by delivering written notice to the Designated Holders who requested inclusion of Registrable Securities in such Registration Statement of its determination to postpone such Registration Statement; PROVIDED, FURTHER, THAT (i) the Company shall not disclose any information that could be deemed material non-public information to any holder of Registrable Securities included in a Registration Statement that is subject to such postponement, (ii) in no event may the Company postpone a filing requested hereunder more than twice in any twelve (12) month period; PROVIDED, THAT any two postponements must be at least three (3) months apart and (iii) in no event shall the foregoing apply to any registration pursuant to Section 1.2; PROVIDED, FURTHER, THAT the Company shall delay the effectiveness of any Demand Registration Statement if the SEC rules and regulations prohibit the Company from declaring a Registration Statement effective because its financial statements are stale at a time when its fiscal year has ended or it has made an acquisition reportable under Item 2 of Form 8-K or any other similar situation until the earliest time in which the SEC would allow the Company to declare a Registration Statement effective (provided that the Company shall use its reasonable best efforts to cure any such situation as soon as possible so that the Registration Statement can be made effective at the earliest possible time);

(b) prepare and file with the SEC such amendments and supplements to such Registration Statement and the prospectus used in connection therewith as may be necessary to keep such Registration Statement effective for a period provided for in the applicable Section above, or if not so provided, for a period of twenty four (24) months (for a registration pursuant to Rule 415 of the Securities Act) or, if such Registration Statement relates to an underwritten offering, such longer period as in the opinion of counsel for the underwriters a prospectus is required by law to be delivered in connection with sales of Registrable Securities by an underwriter or dealer or (ii) such shorter period as will terminate when all of the securities covered by such Registration Statement have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof set forth in such Registration Statement (but in any event not before the expiration of any longer period required under the Securities Act), and to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such Registration Statement until such time as all of such securities have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof set forth in such Registration Statement. In the event the Company shall give any notice pursuant to Section 1.5(b), the applicable time period mentioned in this Section 1.6(b) during which a Registration Statement is to remain effective shall be extended by the number of days during the period from and including the date of the giving of such notice pursuant to Section 1.5(b) to and including the date when each seller of a Registrable Security covered by such Registration Statement shall have received the copies of the supplemented or amended prospectus contemplated by Section 1.6(e);



(c) furnish to each seller of Registrable Securities, prior to filing a Registration Statement, such number of copies of such Registration Statement, each amendment and supplement thereto, the prospectus included in such Registration Statement (including each preliminary prospectus) and such other documents as such seller may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such seller;

(d) register or qualify such Registrable Securities under such other securities or blue sky laws of such jurisdictions as any seller reasonably requests and do any and all other acts and things which may be reasonably necessary or advisable to enable such seller to consummate the disposition in such jurisdictions of the Registrable Securities owned by such seller and to keep each such registration or qualification (or exemption therefrom) effective during the period which the Registration Statement is required to be kept effective (provided, that the Company will not be required to (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this subparagraph, (ii) subject itself to taxation in any such jurisdiction or (iii) consent to general service of process in any such jurisdiction);

(e) notify each seller of such Registrable Securities, at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of the happening of any event (a "CHANGING EVENT") as a result of which, the prospectus included in such Registration Statement contains an untrue statement of a material fact or omits any fact necessary to make the statements therein not misleading in the light of the circumstances under which they were made, and, at the request of any such seller, the Company will as soon as possible prepare and furnish to such seller (a "CORRECTION EVENT") a reasonable number of copies of a supplement or amendment to such prospectus so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any fact necessary to make the statements therein not misleading in the light of the circumstances under which they were made;

(f) cause all such Registrable Securities to be listed on each securities exchange on which similar securities issued by the Company are then listed and, if not so listed, to be listed on The Nasdaq Stock Market or the Nasdaq SmallCap trading system;

(g) provide a transfer agent and registrar for all such Registrable Securities not later than the effective date of such Registration Statement;

(h) enter into such customary agreements (including underwriting agreements in customary form with any underwriter selected pursuant to 1.2(f)) and take all such other actions as the holders of a majority of the Registrable Securities being sold or the underwriters, if any, reasonably request in order to expedite or facilitate the disposition of such Registrable Securities, including causing its officers to participate in "road shows" and other information meetings organized by an underwriter selected pursuant to Section 1.2(f);



(i) make available for inspection by any seller of Registrable Securities, any underwriter participating in any disposition pursuant to such Registration Statement and any attorney, accountant or other agent retained by any such seller or underwriter, all financial and other records, pertinent corporate documents and properties of the Company, and cause the Company's employees and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant or agent in connection with such Registration Statement;

(j) before filing a Registration Statement or prospectus or any amendments or supplements thereto, the Company shall provide counsel selected by the Designated Holders holding a majority of the Registrable Securities being registered in such registration ("HOLDERS' COUNSEL") and any other Inspector (as defined below) with an adequate and appropriate opportunity to review and comment on such Registration Statement and each prospectus included therein (and each amendment or supplement thereto) to be filed with the SEC, subject to such documents being under the Company's control, and the Company shall notify the Holders' Counsel and each seller of Registrable Securities of any stop order issued or threatened by the SEC;

(k) otherwise comply with all applicable rules and regulations of the SEC, and make available to its security holders, as soon as reasonably practicable, an earnings statement covering the period of at least twelve months beginning with the first day of the Company's first full calendar quarter after the effective date of the Registration Statement, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder;

(l) in the event of the issuance of any stop order suspending the effectiveness of a Registration Statement, or of any order suspending or preventing the use of any related prospectus or suspending the qualification of any securities included in such Registration Statement for sale in any jurisdiction, the Company will use its reasonable best efforts promptly to obtain the withdrawal of such order;

(m) obtain one or more comfort letters, dated the effective date of such Registration Statement (and, if such registration includes an underwritten offering, dated the date of the closing under the underwriting agreement), signed by the Company's independent public accountants in customary form and covering such matters of the type customarily covered by comfort letters as the holders of a majority of the Registrable Securities being sold reasonably request;

(n) provide a legal opinion of the Company's outside counsel, dated the effective date of such Registration Statement (and, if such registration includes an underwritten offering, dated the date of the closing under the underwriting agreement), with respect to the Registration Statement, each amendment and supplement thereto, the prospectus included therein (including the preliminary prospectus) and such other documents relating thereto in customary form and covering such matters of the type customarily covered by legal opinions of such nature;

(o) make available at reasonable times for inspection by any seller of Registrable Securities, any managing underwriter participating in any disposition of such Registrable Securities pursuant to a Registration Statement, Holders' Counsel and any attorney, accountant or other agent retained by any managing underwriter (each, an "INSPECTOR" and collectively, the "INSPECTORS"), all financial and other records, pertinent corporate documents and properties of the Company and its subsidiaries (collectively, the "RECORDS") as shall be reasonably necessary to enable them to exercise their due diligence responsibility, and cause the Company's and its subsidiaries' officers, directors and employees, and the independent public accountants of the Company, to supply all information reasonably requested by any such Inspector in connection with such Registration Statement;

(p) keep Holders' Counsel advised as to the initiation and progress of any registration hereunder including, but not limited to, providing Holders' Counsel with all correspondence with the SEC;

(q) cooperate with each seller of Registrable Securities and each underwriter participating in the disposition of such Registrable Securities and their respective counsel in connection with any filings required to be made with the NASD; and

(r) take all other steps reasonably necessary to effect the registration of the Registrable Securities contemplated hereby.

(s) REGISTRATION EXPENSES. All expenses incident to the Company's performance of or compliance with this Agreement including, without limitation, all registration and filing fees, fees and expenses of compliance with securities or blue sky laws, printing expenses, messenger and delivery expenses, and fees and disbursements of counsel for the Company and all independent certified public accountants, underwriters (excluding discounts and commissions, which will be paid by the sellers of Registrable Securities) and other Persons retained by the Company will be borne by the Company, and the Company will pay its internal expenses (including, without limitation, all salaries and expenses of its Employees performing legal or accounting duties), the expense of any annual audit or quarterly review, the expense of any liability insurance and the expenses and fees for listing the securities to be registered on each securities exchange on which similar securities issued by the Company are then listed or on The Nasdaq National Market, Nasdaq SmallCap Market or the OTC Bulletin Board trading system. Without limitation, the foregoing shall include, with respect to each Registration Statement hereunder, the fees, charges and disbursements up to \$25,000 of one counsel to the Designated Holders (which shall be designated by a majority in interest of the Designated Holders of Registrable Securities participating in the proposed sale pursuant to the Registration Statement in question); PROVIDED, HOWEVER, that the Company shall have no obligation to pay any underwriting discounts or commissions attributable to the sale of Registrable Securities and any of the expenses incurred by such Designated Holders which are not payable by the Company, such costs to be borne by such Designated Holder or Holders.

## 1.7 INDEMNIFICATION.

(a) The Company agrees to indemnify and hold harmless, to the fullest extent permitted by law, each holder of Registrable Securities and its general or limited partners, officers, directors, members, managers, employees, advisors, representatives, agents and Affiliates (collectively, the "REPRESENTATIVES") from and against any loss, claim, damage, liability, attorney's fees, cost or expense and costs and expenses of investigating and defending any such claim (collectively, the "LOSSES"), joint or several, and any action in respect thereof to which such holder of Registrable Securities or its Representatives may become subject under the Securities Act or otherwise, insofar as such Losses (or actions or proceedings, whether commenced or threatened, in respect thereto) arise out of or are based upon (i) any untrue or alleged untrue statement of a material fact contained in any Registration Statement, prospectus or preliminary or summary prospectus or any amendment or supplement thereto or (ii) any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Company shall reimburse each such holder of Registrable Securities and its Representatives for any legal or any other expenses incurred by them in connection with investigating or defending or preparing to defend against any such Loss, action or proceeding; PROVIDED, HOWEVER, that the Company shall not be liable to any such holder or other indemnitee in any such case to the extent that any such Loss (or action or proceeding, whether commenced or threatened, in respect thereof) arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission, made in such Registration Statement, any such prospectus or preliminary or summary prospectus or any amendment or supplement thereto, in reliance upon, and in conformity with, written information prepared and furnished to the Company by such holder of Registrable Securities or its Representatives expressly for use therein or by failure of such holder of Registrable Securities to deliver a copy of the Registration Statement or prospectus or any amendments or supplements thereto after the Company has furnished such holder of Registrable Securities with a sufficient number of copies of the same. In connection with an underwritten offering, the Company will indemnify such underwriters, their officers and directors and each Person who controls such underwriters (within the meaning of the Securities Act) to the same extent as provided above with respect to the indemnification of the holders of Registrable Securities.

(b) In connection with any Registration Statement in which the holders of Registrable Securities are participating pursuant to Sections 1.2, 1.3 and 1.4 hereof, the holders of Registrable Securities will furnish to the Company in writing such information as the Company reasonably requests for use in connection with any such Registration Statement or prospectus and, to the fullest extent permitted by law, each such holder of Registrable Securities will indemnify and hold harmless the Company and its Representatives from and against any Losses, severally but not jointly, and any action in respect thereof to which the Company and its Representatives may become subject under the Securities Act or otherwise, insofar as such Losses (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon (i) the purchase or sale of Registrable Securities during a suspension as set forth in Section 1.5(b) after written receipt of notice of such suspension, (ii) any untrue or alleged

untrue statement of a material fact contained in the Registration Statement, prospectus or preliminary or summary prospectus or any amendment or supplement thereto, or (iii) any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, but, with respect to clauses (ii) and (iii) above, only to the extent that such untrue statement or omission is made in such Registration Statement, any such prospectus or preliminary or summary prospectus or any amendment or supplement thereto, in reliance upon and in conformity with written information prepared and furnished to the Company by such holder of Registrable Securities expressly for use therein or by failure of such holder of Registrable Securities to deliver a copy of the Registration Statement or prospectus or any amendments or supplements thereto after the Company has furnished such holder of Registrable Securities with a sufficient number of copies of the same, and such holder of Registrable Securities will reimburse the Company and each Representative for any legal or any other expenses incurred by them in connection with investigating or defending or preparing to defend against any such Loss, action or proceeding; PROVIDED, HOWEVER, that such holder of Registrable Securities shall not be liable in any such case to the extent that prior to the filing of any such Registration Statement or prospectus or amendment or supplement thereto, such holder of Registrable Securities has furnished in writing to the Company information expressly for use in such Registration Statement or prospectus or any amendment or supplement thereto which corrected or made not misleading information previously furnished to the Company; PROVIDED, FURTHER, HOWEVER, that the obligation to indemnify will be individual to each such holder of Registrable Securities and will be limited to the net amount of proceeds received by such holder of Registrable Securities from the sale of Registrable Securities pursuant to such Registration Statement.

(c) Promptly after receipt by any Person in respect of which indemnity may be sought pursuant to Section 1.7(a) or 1.7(b) (an "INDEMNIFIED PARTY") of notice of any claim or the commencement of any action, the Indemnified Party shall, if a claim in respect thereof is to be made against the Person against whom such indemnity may be sought (an "INDEMNIFYING PARTY"), promptly notify the Indemnifying Party in writing of the claim or the commencement of such action; PROVIDED, that the failure to notify the Indemnifying Party shall not relieve the Indemnifying Party from any liability which it may have to an Indemnified Party otherwise than under Section 1.7(a) or 1.7(b) except to the extent of any actual prejudice resulting therefrom. If any such claim or action shall be brought against an Indemnified Party, and it shall notify the Indemnifying Party thereof, the Indemnifying Party shall be entitled to participate therein, and, to the extent that it wishes, jointly with any other similarly notified Indemnifying Party, to assume the defense thereof with counsel reasonably satisfactory to the Indemnified Party. After notice from the Indemnifying Party to the Indemnified Party of its election to assume the defense of such claim or action, the Indemnifying Party shall not be liable to the Indemnified Party for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof other than reasonable costs of investigation; PROVIDED, that the Indemnified Party shall have the right to employ separate counsel to represent the Indemnified Party and its Representatives who may be subject to liability arising out of any claim in respect of which indemnity may be sought by the Indemnified Party against the Indemnifying Party, but the fees

and expenses of such counsel shall be for the account of such Indemnified Party unless (i) the Indemnifying Party and the Indemnified Party shall have mutually agreed to the retention of such counsel or (ii) in the written opinion of counsel to such Indemnified Party, representation of both parties by the same counsel would be inappropriate due to actual or potential conflicts of interest between them, it being understood, however, that the Indemnifying Party shall not, in connection with any one such claim or action or separate but substantially similar or related claims or actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the fees and expenses of more than one separate firm of attorneys (together with appropriate local counsel) at any time for all Indemnified Parties. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any claim or pending or threatened proceeding in respect of which the Indemnified Party is or could have been a party and indemnity could have been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Party from all liability arising out of such claim or proceeding. Whether or not the defense of any claim or action is assumed by the Indemnifying Party, such Indemnifying Party will not be subject to any liability for any settlement made without its consent, which consent will not be unreasonably withheld.

(d) If the indemnification provided for in this Section 1.7 is unavailable to the Indemnified Parties in respect of any Losses referred to herein, then each Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Losses in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the holders of the Registrable Securities on the other from the offering of the Registrable Securities, or if such allocation is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits but also the relative fault of the Company on the one hand and the holders of the Registrable Securities on the other in connection with the statements or omissions which resulted in such Losses, as well as any other relevant equitable considerations. The relative fault of the Company on the one hand and of each holder of the Registrable Securities on the other shall be determined by reference to, among other things, whether any action taken, including any untrue or alleged untrue statement of a material fact, or the omission or alleged omission to state a material fact relates to information supplied by such party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the holders of the Registrable Securities agree that it would not be just and equitable if contribution pursuant to this Section 1.7(d) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. The amount paid or payable by an Indemnified Party as a result of the Losses referred to in the immediately preceding paragraph shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 1.7, no holder of the Registrable Securities shall be required to contribute any amount in excess of the



amount by which the total price at which the Registrable Securities of such holder were offered to the public exceeds the amount of any Losses which such holder has otherwise paid by reason of such untrue or alleged untrue statement or omission or alleged omission. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. Each holder's obligations to contribute pursuant to this Section 1.7 is several in the proportion that the proceeds of the offering received by such holder of the Registrable Securities bears to the total proceeds of the offering received by all the holders of the Registrable Securities and not joint.

#### 1.8 PARTICIPATION IN UNDERWRITTEN REGISTRATIONS.

(a) No Person may participate in any registration hereunder which is underwritten unless such Person (i) agrees to sell such Person's securities on the basis provided in any underwriting arrangements approved by the Person or Persons entitled hereunder to approve such arrangements (including, without limitation, pursuant to the terms of any over-allotment or "green shoe" option requested by the managing underwriter(s), PROVIDED, that each holder of Registrable Securities shall not be required to sell more than the number of Registrable Securities that such holder has requested the Company to include in any registration) and (ii) completes and executes all questionnaires, powers of attorney, indemnities, underwriting agreements and other documents reasonably required under the terms of such underwriting arrangements and this Agreement.

(b) Each Person that is participating in any registration hereunder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 1.6(e) above, such Person will forthwith discontinue the disposition of its Registrable Securities pursuant to the Registration Statement until such Person's receipt of the copies of a supplemented or amended prospectus as contemplated by such Section 1.6(e).

1.9 CURRENT PUBLIC INFORMATION. The Company covenants that it will file all reports required to be filed by it under the Securities Act and the Exchange Act and the rules and regulations adopted by the SEC thereunder, and will use reasonable best efforts to take such further action as the Purchaser may reasonably request, all to the extent required to enable the holders of Registrable Securities to sell Registrable Securities pursuant to Rule 144 or Rule 144A adopted by the SEC under the Securities Act or any similar rule or regulation hereafter adopted by the SEC. The Company shall, upon the request of a Designated Holder, deliver to such Designated Holder a written statement as to whether it has complied with such requirements.

#### 2. TRANSFERS OF CERTAIN RIGHTS.

2.1 TRANSFER. The rights granted to the Purchaser under this Agreement may be transferred subject to the provisions of Sections 2.2 and 2.3; PROVIDED that nothing contained herein shall be deemed to permit an assignment, transfer or disposition of the Registrable



Securities in violation of the terms and conditions of the Securities Purchase Agreement, the Certificate of Designations of the Series A Preferred Stock, the Warrants or applicable law.

2.2 TRANSFEREES. Any transferee to whom rights under this Agreement are transferred shall, as a condition to such transfer, deliver to the Company a written instrument by which such transferee agrees to be bound by the obligations imposed upon the Purchaser under this Agreement to the same extent as if such transferee were a Purchaser hereunder.

2.3 SUBSEQUENT TRANSFEREES. A transferee to whom rights are transferred pursuant to this Section 2 may not again transfer such rights to any other person or entity, other than as provided in Sections 2.1 or 2.2 above.

3. CERTAIN DEFINITIONS. The following capitalized terms shall have the meanings ascribed to them below:

"Affiliate" means any Person that directly or indirectly controls, or is under control with, or is controlled by such Person. As used in this definition, "control" (including with its correlative meanings, "controlled by" and "under common control with") shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person (whether through ownership of securities or partnership or other ownership interests, by contract or otherwise).

"Closing Price" means, with respect to the Registrable Securities (a) if the shares are listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market, the last reported sales price as reported on such exchange or market; (b) if the shares are not listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market, the average of the last reported closing bid and asked quotation for the shares as reported on the National Association of Securities Dealers Automated Quotation System ("NASDAQ") or a similar service if NASDAQ is not reporting such information; (c) if the shares are not listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market or quoted by NASDAQ or a similar service, the average of the last reported bid and asked quotation for the shares as quoted by a market maker in the shares (or if there is more than one market maker, the bid and asked quotation shall be obtained from two market makers and the average of the lowest bid and highest asked quotation). In the absence of any available public quotations for the Common Stock, the Board and a majority of the Holders shall determine in good faith the fair value of the Common Stock

"Common Stock" means the common stock, par value \$0.001 per share, of the Company.

"Employees" means any current, former, or retired employee, office consultant, advisor, independent contractor, agent, officer or director of the Company.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder.

"Market Price" means, on any date of determination, the average of the daily Closing Price of the Registrable Securities for the immediately preceding thirty (30) days on which the national securities exchanges are open for trading.

"Person" means any individual, company, partnership, firm, joint venture, association, joint-stock company, trust, unincorporated organization, governmental body or other entity.

"Registrable Securities" means, subject to the immediately following sentence, (i) shares of Common Stock issued or issuable upon the conversion of shares of Series A Preferred Stock acquired from the Company pursuant to the Securities Purchase Agreement, (ii) shares of Common Stock issued or issuable upon the exercise of the Warrants acquired from the Company pursuant to the Securities Purchase Agreement and (iii) any shares of Common Stock issued or issuable directly or indirectly with respect to the securities referred to in clause (i) and (ii) by way of stock dividend or stock split or in connection with a combination of shares, recapitalization, merger, consolidation or other reorganization. As to any particular shares of Common Stock constituting Registrable Securities, such shares of Common Stock will cease to be Registrable Securities when they (x) have been effectively registered under the Securities Act and disposed of in accordance with a Registration Statement covering them, (y) have been sold to the public pursuant to Rule 144 (or by similar provision under the Securities Act), or (z) are eligible for resale under Rule 144(k) (or by similar provision under the Securities Act) without any limitation on the amount of securities that may be sold under paragraph (e) thereof.

"Registration Statement" means any registration statement of the Company filed under the Securities Act which covers any of the Registrable Securities pursuant to the provisions of this Agreement, including the prospectus, amendments and supplements to such registration statement, including post-effective amendments, all exhibits and all material incorporated by reference in such registration statement.

"SEC" means the United States Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

"Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations of the SEC promulgated thereunder.

4. MISCELLANEOUS.

4.1 RECAPITALIZATIONS, EXCHANGES, ETC. The provisions of this Agreement shall apply to the full extent set forth herein with respect to (i) the Securities, (ii) any and all shares of Common Stock into which the Securities are converted, exchanged or substituted in any recapitalization or other capital reorganization by the Company and (iii) any and all equity

securities of the Company or any successor or assign of the Company (whether by merger, consolidation, sale of assets or otherwise) which may be issued in respect of, in conversion of, in exchange for or in substitution of, the Securities and shall be appropriately adjusted for any stock dividends, splits, reverse splits, combinations, recapitalizations and the like occurring after the date hereof. The Company shall cause any successor or assign (whether by merger, consolidation, sale of assets or otherwise) to enter into a new registration rights agreement with the Designated Holders on terms substantially the same as this Agreement as a condition of any such transaction.

4.2 NO INCONSISTENT AGREEMENTS. The Company has not and shall not enter into any agreement with respect to its securities that is inconsistent with the rights granted to the Purchasers in this Agreement or grant any additional registration rights to any Person or with respect to any securities which are not Registrable Securities which are prior in right to or inconsistent with the rights granted in this Agreement.

4.2 AMENDMENTS AND WAIVERS. The provisions of this Agreement may be amended and the Company may take action herein prohibited, or omit to perform any act herein required to be performed by it, if, but only if, the Company has obtained the written consent of holders of at least a majority of the Registrable Securities then in existence.

4.3 SEVERABILITY. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be held to be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

4.4 COUNTERPARTS. This Agreement may be executed in one or more counterparts each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

4.5 NOTICES. All notices, requests and other communications to any party hereunder shall be in writing (including telecopy, telex or similar writing) and shall be deemed given or made as of the date delivered, if delivered personally or by telecopy (provided that delivery by telecopy shall be followed by delivery of an additional copy personally, by mail or overnight courier), one day after being delivered by overnight courier or three days after being mailed by registered or certified mail (postage prepaid, return receipt requested), to the parties at the following addresses (or to such other address or telex or telecopy number as a party may have specified by notice given to the other party pursuant to this provision):

If to the Company, to:

Bioenvision, Inc.  
One Rockefeller Plaza  
Suite 1600  
New York, New York 10020  
Attention: President  
Facsimile: (212) 265-4680

With a copy (which shall by itself not constitute notice) to:

Piper Rudnick LLP  
1251 Avenue of the Americas  
New York, New York 10020-1104  
Attention: Andrew J. Cosentino, Esq.  
Facsimile: (212) 884-8588

If to the Purchaser, to:

The address or facsimile number of each Purchaser as recorded in the stockholders records of the Company.

4.6 GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflicts of laws rules or provisions.

4.7 FORUM; SERVICE OF PROCESS. Any legal suit, action or proceeding brought by any party or any of its affiliates arising out of or based upon this Agreement shall be instituted in any federal or state court in New York County, New York, and each party waives any objection which it may now or hereafter have to the laying of venue or any such proceeding, and irrevocably submits to the jurisdiction of such courts in any such suit, action or proceeding.

4.8 CAPTIONS. The captions, headings and arrangements used in this Agreement are for convenience only and do not in any way limit or amplify the terms and provisions hereof.

4.9 NO PREJUDICE. The terms of this Agreement shall not be construed in favor of or against any party on account of its participation in the preparation hereof.

4.10 WORDS IN SINGULAR AND PLURAL FORM. Words used in the singular form in this Agreement shall be deemed to import the plural, and vice versa, as the sense may require.

4.11 REMEDY FOR BREACH. The Company hereby acknowledges that in the event of any breach or threatened breach by the Company of any of the provisions of this Agreement,

the holders of the Registrable Securities would have no adequate remedy at law and could suffer substantial and irreparable damage. Accordingly, the Company hereby agrees that, in such event, the holders of the Registrable Securities shall be entitled, and notwithstanding any election by any holder of the Registrable Securities to claim damages, to obtain a temporary and/or permanent injunction, without proving a breach therefor, to restrain any such breach or threatened breach or to obtain specific performance of any such provisions, all without prejudice to any and all other remedies which any holder of the Registrable Securities may have at law or in equity.

4.12 SUCCESSORS AND ASSIGNS; THIRD PARTY BENEFICIARIES. This Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the parties hereto, each subsequent holder of the Registrable Securities and their respective successors and assigns and executors, administrators and heirs. Holders of the Registrable Securities are intended third party beneficiaries of this Agreement and this Agreement may be enforced by such holders.

4.13 ENTIRE AGREEMENT. This Agreement sets forth the entire agreement and understanding between the parties as to the subject matter hereof and merges and supersedes all prior discussions, agreements and understandings of any and every nature among them.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties hereto have caused this Registration Rights Agreement to be duly executed as of the date and year first written above.

BIOENVISION, INC.

By: /s/ Christopher B. Wood

-----  
Name: Dr. Christopher B. Wood  
Title: Chief Executive Officer

PURCHASER:

PERSEUS-SOROS BIOPHARMACEUTICAL FUND, L.P.

-----  
(Name of Purchaser)

By: Perseus-Soros Partners, LLC,  
General Partner

By: SFM Participation, L.P.,  
Managing Member

By: SFM AH, Inc.,  
General Partner

By: /s/ Richard D. Holahan, Jr.

-----  
Name: Richard D. Holahan, Jr.  
Title: Secretary



# BIOENVISION INC

345 PARK AVENUE  
41ST FLOOR  
NEW YORK, NY 10154  
212-750-6700

## EX-24

EXHIBIT 6  
SC 13D Filed on 05/20/2002  
File Number 005-78274



EXHIBIT 6  
to SCHEDULE 13D

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENT, that I, GEORGE SOROS, hereby make, constitute and appoint each of Armando T. Belly, Jodye Anzalotta, Maryann Canfield, Sean Cullinan, Richard D. Holahan, Jr. and Robert Soros acting individually, as my agent and attorney-in-fact for the purpose of executing in my name, (a) in my personal capacity or (b) in my capacity as Chairman of, member of or in other capacities with Soros Fund Management LLC ("SFM LLC") and each of its affiliates or entities advised by me or SFM LLC, all documents, certificates, instruments, statements, filings and agreements ("documents") to be filed with or delivered to any foreign or domestic governmental or regulatory body or required or requested by any other person or entity pursuant to any legal or regulatory requirement relating to the acquisition, ownership, management or disposition of securities, futures contracts, or other investments, and any other documents relating or ancillary thereto, including but not limited to, all documents relating to filings with the Commodities Futures Trading Commission and National Futures Association, the United States Securities and Exchange Commission (the "SEC") pursuant to the Commodities Exchange Act and the Securities Act of 1933 or the Securities Exchange Act of 1934 (the "Act") and the rules and regulations promulgated thereunder, including all documents relating to the beneficial ownership of securities required to be filed with the SEC pursuant to Section 13(d) or Section 16(a) of the Act and information statements on Form 13F required to be filed with the SEC pursuant to Section 13(f) of the Act.

All past acts of the attorney-in-fact in furtherance of the foregoing are hereby ratified and confirmed.

Execution of this power of attorney revokes that certain Power of Attorney dated as of the 27th day of January 2000 with respect to the same matters addressed above.

This power of attorney shall be valid from the date hereof until revoked by me.

IN WITNESS WHEREOF, I have executed this instrument as of the 15th day of January, 2002.

/s/ George Soros

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GEORGE SOROS